Frederic J. Athearn

Oil and Gas Industry Contributes to Cultural Heritage Management on Public Lands

For over a quarter of a century, the oil and gas industry has made major contributions to the discovery and management of cultural properties in the West.

The first Arab embargo driven "energy boom" to hit the West was directly related to the so-called "energy crisis" of the early 1970s. In 1973, Arab nations boycotted the United States, shutting off supplies of cheap oil. The ensuing "crisis" of gasoline shortages lead to long lines, rationing, and skyrocketing prices. The federal government decided to help increase domestic production by offering incentives to oil and gas operators, as well as to coal and alternative fuels such as oil shale. Additionally, the government wanted consumers like power plants to switch from oil to low sulphur coal since there were huge reserves of that mineral in the West. About the same time, oil shale production which has boomed in spurts since at least 1890 became popular once again. Numerous oil companies proposed to build shale processing plants and extract oil for no more than $40 per barrel. Considering the cost of Persian Gulf oil was around $32 per barrel in the mid-1970s, the economics might have been valid.

While the mad rush to develop federal mineral reserves was going on in the West, oil production also increased. New discoveries such as the Overthrust Belt in Wyoming led to greatly enhanced drilling. Deep well technology also made it possible to drill for oil that was previously thought to be unavailable. Older fields like the Rangely Field were given a new life through tertiary recovery techniques. West Texas fields were injected with carbon dioxide to increase their production. All of this was due to the high price of oil. Thanks to the Arab Embargo, domestic oil prices soared. At $35 a barrel, exploration and production was feasible. During 1979, another Arab oil embargo began a second "crisis." This time, however, gasoline shortages were not as severe. The price of oil again rose dramatically, which helped spur domestic production.

Western oil and gas drilling increased some 200% between 1975 and 1981. Much of the activity was in Colorado, Utah, New Mexico, Montana, Wyoming, and in older areas like Texas, Kansas, and the Dakotas. In addition to coal and oil shale projects, the BLM and to a lesser extent, the U.S. Forest Service were overwhelmed by the demand for service. In most cases, the BLM was so underfunded and understaffed that there was no possible way to meet industry's demand for cultural and environmental compliance. While it is true that BLM (and other land management agencies) were required to provide these services to land users, there was no practical way to do so. The waiting time for BLM staff to do "clearances" would be outrageous. So enter the "consulting archeologist".

Industry, realizing that environmental and cultural resource compliance would cause delays, offered to pay for the services of consultants who would do the work, submit it to the land management agency for review. The federal agency would still be responsible for consultation with the State Historic Preservation Office and the Advisory Council for Historic Preservation, for instance, but at least the field work would get done in a timely manner. Initially, colleges and universities did consulting work. There were no guidelines for field inventory and mitigation, so in the early 1970s most cultural resources projects were truly flying by the seat of their pants. The result was inconsistent data, poor quality inventory and, in some cases, outright fraud. Worse, the university consultants could not keep up with the demand.

Because of intense pressure for compliance, a number of "environmental consulting" firms entered the field. They offered complete services from preparing environmental impact statements to handling cultural resource surveys. Compliance packages were sold on a project basis. Again, archeologists were hired to do survey work. They could be private firms that were subcontracted, or they could be a consulting company's employee. Whichever the case, the system was the same. The field inventory would be done, written up,

and submitted to the land management agency for Section 106 consultation.

The other category of consultants was the private contractor. Prior to the mid-1970s there were virtually no private consulting archeologists. That was because there was no demand for their services. But during the "energy boom," the need for help soared. Dozens of firms were established to provide what came to be called "cultural resources management" or CRM. These organizations functioned like the universities or environmental consultants. They did the field inventory, evaluation, and if needed, mitigation. Reports were submitted to the land management agency for consultation. This system of private/government partnership, that began in the 1970s, continues, virtually unchanged to this day. The cottage industry of consulting archeologists spawned in the 1970s remains alive and well.

It is important to remember that not only did consultants provide inventory services, but in many cases also did excavations that were required for mitigation. One other function the federal government served was to permit consulting archeologists. Under the old 1906 Antiquities Act, anyone working on federal lands had to have a permit. Prior to 1982, all Antiquities Permits were issued by the Departmental Consulting Archeologist (DCA) in the Secretary of the Interior's office. Permits were issued based on professional criteria developed by the DCA. The system was highly centralized and often extremely slow to move. In 1984, the BLM got direct permit authority from the Secretary. This was based on the passage of BLM's organic act, the Federal Land Policy and Management Act of 1976. Under Section 302(b), BLM issued cultural resource use permits. These were done at the state office level and this new process greatly reduced administrative time. In addition to "survey" permits, the Archaeological Resources Protection Act (ARPA) of 1979 required that a permit be issued for excavation of archeological sites. To do so without a permit is a criminal offense. Thus, the federal government granted permits to assure professional quality personnel and it did the required consultation under the law.

The result of all this activity was the ongoing inventory and often mitigation of significant archeologic and historic sites located on public lands. The "energy boom" which lasted until about 1984, drove thousands of big and small surveys. The big inventories involved thousands of acres and were generally driven by coal mining. But for every large project there were (and are) hundreds of small operations. Oil and gas accounted for most of this activity. Well pads of only a few acres, pipeline rights of way, roads, and other associated activities resulted in hundreds, if not thousands, of small surveys.

All over Colorado, New Mexico, Utah, Montana, and Wyoming hundreds of oil wells were drilled on federal lands and/or for federal minerals. The result was hundreds of "inventory" reports generated to comply with the 1966 act. These documents were sometimes scattered based on drilling patterns. In some cases, larger development areas were "block surveyed" to "clear" an area of hundreds, or maybe thousands of acres, prior to field progress. The result of the larger surveys were that the oil and gas industry provided valuable archeological data for thousands of acres of both federal and private land. The significance of this is that areas that had never been looked at before, became known to archeologists. By taking pieces of this puzzle and putting them together, an overall picture began to emerge. What were once considered "nominal" sites became important because they contributed to the historic context of a region.

The result is that over the last 20 years, archeologists have increased the body of knowledge on a scale that was previously unknown. This is particularly true in the Four Corners area. The Farmington, New Mexico District, BLM, has generated numerous reports from oil and gas activity. The San Juan Resource Areas in both Colorado and Utah now have a far better picture of Anasazi culture thanks to inventory perfomed for oil and gas seismic and other enterprises.

One of the earlier projects, the Shell Oil Company CO2 development on Mockingbird Mesa, Colorado entailed the inventory of three thousand acres of Anasazi culture. The result was Colorado BLM's publication *The Mockingbird Mesa Survey* by Jerry Fetterman and Linda Honeycutt (1988). The Mockingbird Mesa project showed that data generated by survey could be put to good use. In fact, oil and gas surveys have contributed to the body of knowledge over the years in the form of publications that are used by professionals, schools, and the general public. Industry paid for the survey work, and the BLM picked up the publication costs. In a sense, a partnership has formed to get information out to researchers as well as the public where it can be used by those interested in this subject.

In addition to publications, there are thousands of small reports that were created as part of the compliance process. The majority of these projects involve oil and gas operations. Most of this "grey literature" is unpublished, on somebody's office shelf, and generally never used. Some reports dating back to the late 1970s are massive tomes that, at the time, represented state of the art research. This included predictive models,

overviews, and some large area surveys. They too have never been published or even used much. In some cases, only one or two copies exist in a BLM office or in the State Historical Society's library. Hence, a good deal of the material that was generated over the last 20 years, much of it thanks to the oil and gas industry, continues to languish on dark shelves, the pages yellowing and turning to dust. This "grey literature" never made it to the mainstream academic world. Many researchers do not know of its existence. Hence, a huge body of literature remains hidden from society.

Industry has done much to fund individual surveys, and in some enlightened cases, large area inventories. The scattered single project reports may not be of great scientific value per se, but when they are compiled into a regional context, they become a significant part of the whole. Individual hearths, lithic scatters, isolated finds, and so forth show archeologists a pattern of human use and occupation of the land. The sites reveal how folks lived, where they were and what kind of life they had. Wyoming, for example, has some 50,000 to 60,000 archeological and historical sites on record. Most have been generated since 1975 and the majority are a result of oil and gas inventory.

Equally important are negative reports. These are even more marginal than small project reports. They basically say, "I found nothing here." But that can be as important as finding sites. By not discovering anything, we know where prehistoric people were not. Unfortunately, not all of this good information has been collected, synthesized, and placed into regional contexts. Some BLM Class I (overview) documents have attempted to do just this; but they are few and far between.

The other contribution the oil and gas industry has made to science is on a larger scale. Some more forward-thinking oil companies realized the economy of scale in doing large area surveys (or what were once called block surveys) to "clear" an entire field in one shot. Shell Oil Company did this at Mockingbird Mesa for the CO^2 project. Arco proposed such a clearance north of Grand Junction, Colorado. Chandler has done this level of survey in their field south of Rangely, Colorado. Block clearances are more common in Wyoming where tens of thousands of acres were surveyed. The obvious advantage of this method for inventory is that you get all the compliance work done at once, eliminating piecemeal operations. The benefit for the archeologists is that a larger region is examined that, in turn, affords a contextual look at the history and prehistory of the region.

Several world-class sites have been found due to oil and gas activity. Probably the most famous is the Mesa Site in Alaska. In 1978, it was recorded during a routine oil and gas inventory. At the time, it was suspected to be an important site, but due to location and remoteness, it was more than 10 years later that the site was excavated. The results were impressive. Here was one of the earliest prehistoric sites in North America. The place was a summer hunting camp from which aboriginal hunters sought game. The significance of this site was that it brought into question some long held theories about migration across the Bering Strait.

The oil and gas industry has financed thousands of acres of inventory in the West. Tens of thousands of sites were recorded, and in many cases excavated. Federal agencies along with land users such as oil and gas have contributed to the body of archeological literature in the West. (Sadly, these efforts of 20 years are not recognized by the academic world.) These contributions, however, have not always been made willingly. Some would say that various industries who use the public lands only do what is minimally needed to comply with the law. This might be true with some land users, but most oil and gas operators are more than cooperative about complying with the various statutes. In a sense, a *de facto* partnership grew up between federal land managers and these public land users.

Frederic Athearn is a historian in the Colorado State Office, Bureau of Land Management, Lakewood, CO.

University of Oregon Student Named H. Ward Jandl Fellow

Anne Seaton, graduate student in Historic Preservation at the University of Oregon, is the recipient of the 1996 H. Ward Jandl Fellowship in Historic Preservation sponsored by the Historic Preservation League of Oregon, the University of Oregon Historic Preservation Program, and the Keepers Education Preservation Fund. Awarded as a tribute to H. Ward Jandl, former deputy chief of the National Park Service Preservation Assistance Division, Oregon's Jandl Fellowship recognizes excellence in the preparation of historic documentation in fulfillment of Master's degree requirements in historic preservation. By researching and documenting the Lone Pine Tree Indian Shaker Village in The Dalles, Oregon, Seaton makes a practical contribution to the historic record of Oregon's cultural heritage landscape. For more information about the H. Ward Jandl Fellowship Fund, contact the editor, *CRM* (see page 2).